

REMARKS

Prior to this communication, claims 1, 2, 4 – 9, 19, 21 – 24, 26 – 28 are pending in the application. In the pending Office action, the Examiner rejected claims 1, 2, 4 – 9, 19, 21 – 24, 26 – 28. In response, Applicants are amending claims 1, and 19, and adding claims 41 and 42; thus leaving claims 2, 4 – 9, 21 – 24, 26, 27, and 28 unchanged. Examination and reconsideration in view of the amendments and remarks contained herein are respectfully requested.

Claims 1, 2, 5, 9, 19, 21, 24, and 28 stand rejected under 35 U.S.C § 102(b) as being anticipated by U.S. Patent No. 6,310,404 (“Frank”). The Examiner indicated that Frank discloses a generator having “a plug (32a, Fig. 1) extending from the housing and adapted to be inserted into a power receptacle,” among other things. (Section 3, page 2, Action.)

Applicants respectfully disagree.

Frank does not disclose a stand-alone detachable load monitoring module as recited in claim 1. Frank does not disclose a load monitoring module at all, much less a detachable, stand-alone load monitoring module.

Also, Frank does not disclose a plug extending from the housing, but only receptacles in the control panel.

Also, amended claim 1 requires “an electrical plug extending from the housing and adapted to be inserted into a power receptacle,” among other things. Frank does not teach or fairly suggest “an electrical plug extending from the housing and adapted to be inserted into a power receptacle,” as recited in claim 1. Rather, Frank discloses that the “plurality of AC plugs (actually receptacles), energy output ports, 32a into which electrical plugs can be inserted for purposes of receiving energy from system 10.” (parentheses added) (Col. 5, lines 52 – 54.) Also as shown in FIG. 1A of Frank, reference numerals 32a generally refer to a plurality of power receptacles although they were referred to as “AC plugs.” That is, Frank discloses that electrical plugs are to be inserted into the AC plugs. In other words, the “AC plugs” as disclosed in Frank, are not the same as an electrical plug that is recited in claim 1. Therefore, independent claim 1 is allowable. Dependent claims 2, 4 – 9, 28, and 41 therefore also include patentable subject matter for the reasons set forth above with respect to claim 1.

In addition, Frank does not disclose an indicator adapted to output at least one discontinuous humanly perceptible indication of the sensed signal supplied to the load.

Similarly, independent claim 19 recites “a stand-alone detachable module having a housing, a sensor disposed in the housing, an electrical plug extending from the housing, and having a humanly perceptible indicator interconnected with the housing,” among other things. Frank does not teach or fairly suggest “a stand-alone detachable module having a housing, a sensor disposed in the housing, an electrical plug extending from the housing, and having a humanly perceptible indicator interconnected with the housing,” as recited in claim 19, and as explained with respect to claim 1. Therefore, independent claim 19 is also allowable. Dependent claims 21, 22, 24, 27, and 42 also include patentable subject matter for the reasons set forth above with respect to claim 19.

The Examiner also rejected claims 4, 6, 8, 22, and 27 under 35 U.S.C § 103(a) as being unpatentable over Frank in view of U.S. Patent No. 4,798,082 (“Fujikawa”).

To establish a *prima facie* case of obviousness, three basic criteria must be met. *M.P.E.P.* § 706.02(j), and 2143.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be both found in the prior art, not in applicant’s disclosure.

Id. See also *In re Rougget*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) (“To reject claims in an application under section 103, the Examiner must show an un rebutted *prima facie* case of obviousness. In the absence of a proper *prima facie* case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent.”)

The Examiner has not set forth a proper *prima facie* case of obviousness. For example, the Examiner must show that the prior art reference (or references when combined) teaches or fairly suggests all the claim limitations. First, amended claim 1 recites, among other things, “an electrical plug extending from the housing and adapted to be inserted into a power receptacle.” As discussed above with respect to claim 1, Frank does not teach or fairly

suggest at least “an electrical plug extending from the housing and adapted to be inserted into a power receptacle,” as recited in claim 1.

Fujikawa does not cure the deficiency of Frank.

Currently amended claim 1 requires a stand-alone detachable load monitoring module that includes a module housing, and a sensor in the housing that is adapted to sense a signal supplied to the load, among other things. However, Fujikawa discloses that:

[A]ll of the signals from the circuits 30c, 30e, 30f, 38b, 38d, 38e, 57 and 59 (which are located in the main body 2) are in analog form and are fed through the wires in the multicore cable 48 to the CPU 32 contained in the remote display-control device 46. The couplers or plugs 49 and 50 (or 54 and 55) of the cable are shown in FIG. 5. It will be noted that the throttle-control signal to the coil 33 and the ignition primary grounding signal to stop the engine are fed back through the cable 48 and the couplers 49 and 50 to circuits in the main body 2. The latter two signals are converted from digital to analog form in the CPU 32 before being fed back through the cable. (Column 5, lines 55-65)

Fujikawa therefore discloses that output signals that are analog in nature, are transferred from the circuits 30c, 30e, 30f, 38b, 38d, 38e, 57 and 59 at the generator 3, through the couplers 49, 54 at the generator 3, the cable 48, the couplers 50, 54 at the control-display device 46, to the computing circuits 32 at the control-display device 46. That is, circuits that sense conditions of the signals are located at the generator 3 rather than at the display device 46. In other words, the control-display device 46 does not include “a sensor in the housing, connected in circuit with the plug, and adapted to sense a signal supplied to the load,” as recited in claim 1. Rather, the control-display device 46 merely receives the output signals such as overload warning signals, AC voltage data and frequency data signals from the circuits 30c, 30e, 30f, 38b, 38d, 38e, 57 and 59 at the computing circuits 32 through the cable 48 in analog form. (Col. 3, lines 30 – 43, and col. 4, lines 15 – 17) The control-display device 46 then converts or digitizes the output signals such as overload warning signals, AC voltage data and frequency data signals in analog form in the computing circuits 32, and displays at a display window 15. (Col. 4, lines 19 – 21.) Therefore, neither Frank nor Fujikawa, alone or in combination, teaches or suggests a stand-alone detachable load monitoring module that includes “an electrical plug extending from the housing and adapted to be inserted into a power receptacle,” and “a sensor in the housing” that is “adapted to sense a signal supplied to the load,” and as recited in claim 1.

Similarly, Fujikawa also discloses that branches 30b, 30d are connected to a “circuit 30c for developing a voltage signal which is fed to the computing circuits 32 (CPU) as an overload warning signal,” and to a “circuit 30e for developing an analog signal which is fed to the computing circuits 32 as the AC voltage data and the AC frequency data.” (Col. 3, line 68 – col. 4, line 3, and col. 4, lines 11 – 14.) The generator 3 thus sends the sensed and processed signals to the control-display device 46 via the cable 48 for digital display only. Therefore, neither Frank nor Fujikawa, alone or in combination, teaches or suggests a stand-alone detachable load monitoring module that includes “a module housing,” and “a sensor in the housing, and adapted to sense a signal supplied to the load,” as recited in claim 1.

Further, Fujikawa discloses a portable engine-generator set 3 that has power receptacles or output sockets 9 on a control panel 6 of the portable engine-generator set 3. (Col. 2, lines 23 – 25.) The portable engine-generator set 3 further includes a terminal of the AC circuit breaker 10 that is “connected to one of the terminals of the AC power output socket 9. The other end of the output winding 30 is connected to the other output terminal of the output socket 9 via a current transformer 31.” (Col. 3, lines 55 – 63.) Furthermore, branches 30b, 30d are connected to a “circuit 30c for developing a voltage signal which is fed to the computing circuits 32 (CPU) as an overload warning signal,” and to a “circuit 30e for developing an analog signal which is fed to the computing circuits 32 as the AC voltage data and the AC frequency data.” (Col. 3, line 68 – col. 4, line 3, and col. 4, lines 11 – 14.) That is, the control-display device 46 is not inserted into any of the output sockets 9. Rather, the control-display device 46 is merely connected to the generator 3 through the cable 48, the circuits 30c, 30e, and the branches 30b, 30d, such that digital form of the processed and sensed output signals are displayed. In other words, neither Frank nor Fujikawa, alone or in combination, teaches or suggests a stand-alone detachable load monitoring module that includes “a module housing,” “an electrical plug extending from the housing and adapted to be inserted into a power receptacle,” and “a humanly perceptible indicator interconnected with the housing and adapted to output at least one discontinuous humanly perceptible indication of the sensed signal supplied to the load,” as recited in claim 1.

Therefore, independent claim 1 includes patentable subject matter. Dependent claims 2, 4 – 6, 8, 9, 28, and 42 therefore also include patentable subject matter for at least the reasons set forth above with respect to claim 1.

Similarly, independent claim 19 recites “a stand-alone detachable module having a housing, a sensor disposed in the housing, an electrical plug extending from the housing, and having a humanly perceptible indicator interconnected with the housing,” among other things. Neither Frank nor Fujikawa, alone or in combination, teaches or suggests “a stand-alone detachable module having a housing, a sensor disposed in the housing, an electrical plug extending from the housing, and having a humanly perceptible indicator interconnected with the housing,” as required by claim 19 as explained with respect to claim 1. Therefore, independent claim 19 includes patentable subject matter. Dependent claims 21, 22, 24, 27, and 42 also include patentable subject matter for the reasons set forth above with respect to claim 19.

Applicants also note that Fujikawa teaches away from claims 1 and 19, because “the cable section 48a is wired directly into the main body 2 and the cable section 48b is wired directly into the control device 46.” (Col. 2, line 67 – col. 3, line 1.) That is, the cable 48 that includes sections 48a, 48b, 53, is wired directly into the generator 3 and the control-display device 46. Therefore, Fujikawa explicitly teaches away from having a stand-alone detachable module that has “an electrical plug extending from the housing and adapted to be inserted into a power receptacle,” as recited in claim 1. Fujikawa also explicitly teaches away from having “an electrical plug extending from the housing” and “inserting the electrical plug into a power receptacle,” required by claim 19. Accordingly, independent claims 1 and 19 are allowable.

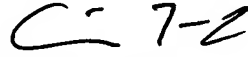
Claims 41 and 42 have been added and include additional patentable subject matter which may be allowable for one or more of the reasons set forth above with respect to claims 1 and 19, and/or for additional reasons not discussed herein. Particularly, claims 41 and 42 are dependent from claims 1 and 19, respectively. Accordingly, claims 41 and 42 include patentable subject matter for the reasons set forth above with respect to claims 1 and 19, respectively.

CONCLUSION

Entry of the Amendment and allowance of claims 1, 2, 4 – 9, 19, 21, 22, 24, 26 – 28, 41, and 42 are respectfully requested. The undersigned is available for telephone consultation at any time during normal business hours.

Serial No. 10/773,510
Docket No. 039189-9071
Response to Office Action dated 11/02/2005

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'C- 7-2'.

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